(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

REVISED VERSION

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 6 May 2005 (06.05.2005)

PCT

(10) International Publication Number WO 2005/040381 A1

(51) International Patent Classification⁷: C12N 15/52, 15/82, 9/10, A01H 1/00, 5/00, A23L 1/0522

(21) International Application Number:

PCT/AU2004/001517

(22) International Filing Date: 27 October 2004 (27.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/515,102

27 October 2003 (27.10.2003) US

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

[Continued on next page]

(54) Title: RICE AND PRODUCTS THEREOF HAVING STARCH WITH AN INCREASED PROPORTION OF AMYLOSE

1 GCCACCGACA TCCGCCGCAA TGCTGTGTCT CACCTCCTCT TCCTCCTCCG CGCCCGCTCC 61 GCTCCTTCCC TCTCTCGCTG ATCGACCGAG CCCGGGAATC GCGGGGGGGG GTGGCAATCT
121 TCGCCTGAGC GTGGTTTCTT CGCCGCGCCG GTCGTGGCCT GGAAAGGTCA AGACCAATTT 181 CTCAGTTCCT GCGACTGCGC GAAAAAACAA AACCATGGTG ACTGTTGTGG AGGAGGTCGA 241 CCACCTTCCT ATATATGATC TGGACCCTAA GTTGGAGGAA TTCAAGGATC ACTTCAACTA 301 TAGGATAAAA AGATACCTCG ACCAGAAATG CCTGATTGAA AAACATGAGG GGGGCCTTGA
361 AGAATTTCT AAAGGCTATT TGAAGTTTGG GATTAATACA GTTGATGGTG CCACAATATA TOGTGAATGG GCGCCTGCTG CACAAGAAGC ACAGCTCATT GGTGAGTTCA ATAACTGGAA 481 TGGTGCAAAA CACAAGATGG AGAAGGATAA ATTTGGCATT TGGTCAATCA AGATTTCACA 541 TGTCAATGG AAGCCTGCCA TCCCTCACAA TTCCAAGGTT AAATTTCGCT TTAGGCATGG 601 GGGTGGAGCA TGGGTTGATC GTATTCCCGC ATGGATTCGT TATGCAACTT TTGATGCCTC
661 TAAATTTGGA GCTCCATATG ATGGTGTACA CTGGGATCCT CCAGCCTGTG AAAGGTACGT 661 TAAATTTGGA 721 GTTTAAGCAT CCTCGACCTC CAAAACCTGA TGCTCCACGC ATCTATGAGG CTCATGTGGG 781 GATGACTIGG GAGGACCAG AAGTAAGCAC ATACAGAGA TITTGCAGAGA ATGTGTTACC 841 ACGCATACGG GCAAATAACT ACAACACAGT TCAGTTAATG GCAATCATGG AACATTCCTA 901 CTATGCTTCT TTTGGGTATC ACGTGACAAA TTTTTTCGCA GTCAGCACCA GATCAGGAAC 961 ACCAGAGGAT CTGAAATATC TTGTTGACAA GGCACATAGT TTAGGATTAC GAGTTCTGAT 1021 GGATGTTGTC CATAGCCATG CGAGTAATAA TGTGACCGAT GGTCTAAATG GCTATGACGT 1081 TGGACAAAAC ACTCATGAGT CITATITICA TACAGGAGAT AGGGGCTACC ATAAACTCTG
1141 GGATAGTCGT CTGTTCAACT ATGCCAATTG GGAGGTCTTA AGATTTCTTC TTTCTAATTT 1201 GAGATATIGG ATGGACGAAT TCARGTTTIGA TGGCTTCCGA TTTGATGGGG TTACATCAT 1261 GCTATACCAT CACCATGGTA TCARGTATGG ATTTACTGGA AACTACAAGG AGTATTTCAG 1321 TTTGGATACC GATGTGGATG CAATTGTTTA CATGATGCTC GCAAACCATT TAATGCATAA 1381 ACTCTTGCCG GAAGCAACTA TTGTTGCTGA AGATGTTTCG GGCATGCCAG TGCTTTGTCG
1441 GCCAGTTGAT GAAGGTGGAG TAGGGTTTGA CTTCCGCCTG GCAATGGCCA TTCCTGATAG ATGGATTGAC TACCTGAAGA ACAAAGAGGA CCGCAAATGG TCAATGAGTG AAATAGTGCA AACTTTGACT AACAGGAGAT ATACAGAAAA ATGCATTGCC TATGCCGAGA GCCATGATCA GTCCATTGTT GGTGACAAGA CTATAGCATT TCTCTTGATG GACAAGGAAA TGTACACTGG 1621 TTGCAGCCTG CTTCACCTAC CATCAACCGT GGCATTGCAC TCCAAAAGAT ATTACGATGG CCCTTGGAGG TGATGGCTAC TTAAATTTTA TGGGCAATGA CATGICAGAC GATTCACTTC 1801 GTTTGGCCAT CCAGAATGGA TIGACTITICC AAGAGAAGGC AACAACTGGA GCTATGATAA 1861 ATGCAGACGT CAGTGGAGCC TTGTCGACAC TGATCACCTT CGATACAAGT ATATGAATGC 1921 ATTTGATCAA GCAATGAATG CACTCGAGGA GGAATITICC TTCCTGTCAT CATCAAAGCA GATTOTTAGC GACATGAACG AGAAAGATAA GOTTATTOTC TITGAACOTG GAGATTTGG TITTGTTTTC AATTITCATC CCAACAAAC TIACAAGGGT TACAAAGTCG GATGTGACT TACAAAGTCG GATGTGACTT 2101 GCCCGGGAAG TACAGAGTAG CTCTGGACTC TGATGCTTTG GTCTTTGGTG GCCATGGAAG AGTTGGCCAT GATGTGGATC ACTTCACGTC TCCCGAGGGA ATGCCAGGAG TACCAGAAAC
AAATTTCAAC AACCGCCCTA ACTCATTCAA AGTCCTTTCC CCGCCCCGTA CCTGTGTGGC 2281 TRACTATICS GITGATGAAG ATCGTGAAGA GCTCAGGAGG GGTGGAGCAG TTGCTTCTGG
2341 AAAGATTGTT ACAGAGTATA TCGATGTTGA AGCAACAAGT GGGGAGACTA TCTCTGGTGG
2401 CTGGAAGGG TCCGAGAAGG ACGATTGTGG CAAGAAAGG ATGAAGTTTG TGTTTCGGTC 2461 TICTGACGAA GACTGCAAAT GAAGCATCAG ATTTCTTGAT CAGGAGCAAC TGTTGGTTGC 2521 CTTGTAATCT GGAGATCCTG GCTTGCCTTG GACTTGGTTG TGGTTCTTTA GCAGTTGCTA 2581 TGTACCTATC TATGATATGA ACTITIATGTA TAGTTCGCCT TAAAGAAAGA ATAAGCAG CTTAAACCTG AGCTGCACAA GCCTAATGTA AAAATAAAGT TTCAGGCTTT 2701 CATCCAGAAT AAAACAGCTG TTCATTTACC ATCTCAAAA

(57) Abstract: Rice having reduced levels of starch branching enzymes produce grain having a high relative amylose content in the endosperm. The rice grain of this invention can be of a non-shrunken phenotype despite a lesion in the amylopectin synthesis pathway and may be transgenic or nontransgenic.

WO 2005/040381 A1



PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, RE, RG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- (88) Date of publication of the revised international search report: 9 June 2005
- (15) Information about Correction: see PCT Gazette No. 23/2005 of 9 June 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.